Executive Summary: Improving the Department of Natural Resources Spring Turkey Permit Sale

This summary outlines actions taken and planned to protect customers from future licensing sales problems, so hunters can better enjoy their sport.

First-come, first-served excess turkey permits for the spring 2008 season went on sale via the Department of Natural Resources Automated Licensing System (ALIS), phone and Internet sales at 10 a.m. on Friday, March 28th. The sudden sheer volume of demand "crashed" the ALIS system, leaving customers waiting in line for hours. To compensate, Internet sales were suspended and Central Bank, DNR's vendor, added more computing power. The system was sluggish and unacceptable until 5 p.m. that day. DNR's customers were greatly inconvenienced and understandably frustrated. DNR was embarrassed that pretesting and planning failed to prevent the problem and is committed to improving customer service. It is good to note, however, that throughout technology frustrations, DNR customer service staff and license agents earned the respect and vocal gratitude of hunters for their efforts to help customers under very tough circumstances over which they had no control.

Secretary Matt Frank ordered an internal task force immediately to analyze what happened and to assure the situation is not repeated. The group was directed to seek improvements that would maintain the season framework, continue the first-come, first-served system which hunters' value, provide the greatest assurance of quality customer service, review our contractor oversight practices, and also to evaluate potential backup systems that could be implemented quickly if future sales should ever encounter problems. Division Administrator Vance Rayburn led the task force along with Executive Assistant Mary Ellen Vollbrecht, underscoring the priority of the work.

Evaluation of vendor

DNR dispatched a group of state information technology and licensing experts to evaluate ALIS vendor Central Bank's infrastructure, processes and procedures to verify their capability of handling high volume sales. Central Bank's contract requires a level of functional performance requirements and customer service that was not met:

Findings:

- DNR was required to rebid its contract and that rebidding led to a new Central Bank licensing system with new hardware that was introduced in training sessions to vendors in February that was installed in March 2008.
- Central Bank's computer resources shared with banking and other states' license sales were insufficient to handle the spike in demand created from the first-come, first-served sale. However, a huge and simultaneous volume of requests to any system can bring it

- down, as evidenced this year by a web-cast bringing down Oprah Winfrey's website and a Bruce Springsteen concert ticket sale bringing down TicketMaster.
- Testing procedures by Central Bank were inadequate.
- Wisconsin-specific licensing requirements complicated the situation. Licensing is not like selling a ticket. Turkey permit transactions include checking for customer information, purchase prerequisites, unit availability, and revocations and safety certification, so each request is a complex data retrieval transaction.

Results:

- Central Bank acknowledges that there were shortcomings at the time of this sale and immediately put in place corrective measures. They have identified both short and long-term solutions that they feel confident will improve the performance of our system.
- Central Bank has agreed to pay stiff penalties of \$155,000 that will cover all out of pocket costs for the problems including individual apology letters to customers. Of this, \$90,000 will be used to promote youth participation in turkey hunting. Customers will have some satisfaction that their license dollars did not go to fix the problem and their long waits in line will benefit youth hunting in the state.
- The contractor will dedicate a computer server to handle Wisconsin's fall turkey and deer bonus first come, first serve sales. The contractor expects this new server to significantly improve their ability to handle a high transaction volume and Wisconsin will not have to compete with other banking users for computer service. They will also have an alternate server on stand-by should we encounter difficulties.

Sales system review

Secretary Frank directed that all options be considered to assure every potential solution for turkey permit sales was on the table. Ideas came from staff, external groups, and the news media. For each, the benefits and downsides were considered.

The following options, described in more detail below, were considered as solutions used alone or in combination:

- Stagger sales by zone to reduce volume
- Delay the start of Internet sales to reduce volume
- Reserve permits by telephone either as a back-up or primary method

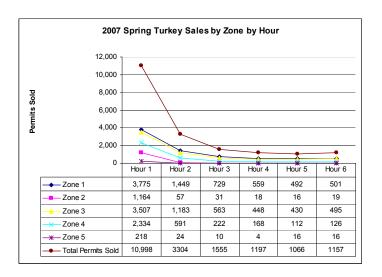
The following were considered but rejected:

- Maintain the status quo rejected. DNR promised and owes the public improvements. Though upgrades have been made by the contractor, we cannot trust that something will not go wrong in the future.
- Change contractors or bring sales on to a state computer system rejected due to the lack of alternate vendors and the cost of building an internal system, estimated at \$10 million.
- Offer unlimited permits in later periods rejected, fails to maintain current season framework and management goals.
- Implement significant changes to the permit issuance process such as implementing a second drawing for permits or changing the season and harvest framework. Such changes would require a formal rule-making process and could be considered only as a last resort and after seeking input from hunters.

Selected options

Staggered sales alone or in combination with the following options should assure DNR can issue spring turkey permits to customers and provide the service they demand and deserve:

Stagger sales by zone: This option restricts sale of permits to one specific zone at a time, at a designated starting date and time. DNR will seek input from the Conservation Congress and hunter groups on how best to stagger sales. The chart shows the potential for a reduced demand on the system compared to selling all zones at one time. The highest demand in 2007 was for Zone 1 permits which represented 34% of the total permits issued within the first hour. Any remaining permits would be made available on a designated date and



time after all zones have been offered to hunters. [The data gathered for each zone was compiled from all of the individual turkey management zones that are now part of the larger consolidated zones. Zones 6 and 7 are not included because permits were not available in 2007.]

Delay the start of Internet sales: There are millions of computers in Wisconsin. There is no way to predict or control the number of people who are requesting permits at any one time via the Internet. When customers experience delays, some will continuously try to refresh the site hoping to get a faster response, which results in further demand of system resources. On the other hand, DNR has a finite number of ALIS vendors and phone operators; volume at opening from these can absolutely be predicted and accommodated. By delaying the start of Internet sales, DNR can reasonably assure the system will perform. This option was recommended by the contractor, and is consistent with how the State of Colorado has been successful in conducting their high volume big game sales.

Reserve Permits by phone: Another option is offering customers the ability to reserve a permit by calling a toll-free number that is staffed by DNR. Permits could be reserved on a first-come, first-served basis. If the sales event is conducted on a weekend, the agency can lease other state agency telephone lines far cheaper than purchasing new lines. We estimate that each permit reservation would take approximately 3 minutes. With 100 operators, we could handle 2,000 permits per hour; and 400 people could wait on hold at any one time. Similarly, with 200 operators, we could handle 4,000 permits per hour; and 200 people could wait on hold at any one time. However, the only way we could be successful in utilizing a telephone reservation system would be to stagger the sales by zone. This option also would cost the department \$20,000 per day to implement, compared to the other options which have no new costs. This option holds great promise as a backup system.

Action plan

The following actions should improve turkey sales to better meet customer needs and expectations of DNR:

- Sell spring 2009 turkey permits one zone at a time [staggered sales.]
- Assure improved testing and additional computing power is implemented by the vendor.
- Use the lower volume fall turkey permit and antlerless deer tag sales to "test drive" technological upgrades to the ALIS system including the use of a Wisconsin-dedicated server and improved testing. Antlerless deer tags go on sale August 23 and fall turkey permits on September 6. Compared to spring turkey permits, the volume of permits sold on the first day is less than one-third for deer, and about one-eighth for fall turkey.
- Solicit input and comments before and after the test drive from key constituencies, such as the Conservation Congress Turkey Committee.
- Based on hunter feedback and internal performance analyses of the "test drive," determine by October 1, 2008 whether additional measures are necessary for Spring 2009 excess turkey permit sales to diminish risks. Implement a back-up plan in the first hours should the system experience problems.